# BULLETIN

### OF THE

## BROOKLYN ENTOMOLOGICAL SOCIETY

Vol. XVI

DECEMBER, 1921

No. 5.

### A NEW DRAGONFLY FROM FLORIDA.

By Wm. T. Davis, Staten Island, N. Y.

In 1839 Say described *Libellula transversa* from a male sent to him from Massachusetts by Dr. Harris. He gives the length of the insect as two inches, and also states "wings hyaline; basal cellula brown." In the complete writings of Say on the Entomology of North America, 1859, Uhler states that the species was "Subsequently described as *Epophthalmia cinnamomea* Bu1m. Handb. 2. 2. 845: and *Didymops servillei* Ramb., Neuropt. 142."

Burmeister's description of *cinnamomea* was made from a female collected in Carolina by Zimmermann, and covers what is now called *transversa*; he also mentions "fuscous basal spot on each wing."

Rambur states that his Didymops servillii is almost the size of quadrimaculata but a little longer, that the wings are hyaline with a small reddish spot in front at the base. Rambur proposed the genus Didymops for servillii (=transversa), which genus is separated from his genus Macromia by having the occiput on the dorsal surface of the head more prominent and much larger than the vertex. In Genera Insectorum, Martin (1914) lists transversa under Macromia, together with nine species placed in that genus by American authors.

In the writer's collection there are two male dragonflies belonging to a species that is close to *Didymops transversa* in structure and markings, but is larger and shows specific differences. One of them was submitted to Mr. E. B. Williamson, who has very kindly loaned me twenty-one specimens of *transversa* from his collection, which, with fourteen from my own,

have constituted the material on which the following conclusions are based.

## Didymops floridensis n. sp.

Type, male. Lakeland, Florida, March 28, 1912 (Davis). Davis collection.

Larger than transversa, and with a sharper front angle to the occiput. When the head is viewed in profile the post-clypeus is seen to be considerably sinuate at the extremity; in transversa there is no sinuation or only a feeble one. The abdominal appendages are about alike in both species, but in floridensis the close set hairs conspicuous on the terminal segments of the abdomen are very short, and about one half as long as in transversa. In the type and paratype of floridensis the lower part of the anal loop is straight and finally angled at the outer extremity, whereas in transversa the lower portion of the loop has generally an even curve.

In transversa the first antecubital space is clouded wholly or in part in both front and hind wings; in floridensis these spaces are clear. In transversa the costa, the median vein, and at least the basal part of the submedian vein are brown or brownish, while in floridensis the venation is black or nearly so except the costa which is pale. In transversa the frons is brown or dark brown; in floridensis it is almost entirely shining black. In transversa the occiput is greenish yellow and more broadly triangular than in floridensis where it is shining lemon yellow in color with the sides forming a more acute angle. The head is dull yellowish behind the eyes in transversa; in floridensis there is a long, narrow, shining black area chiefly above the tubercle, and extending to the occiput. The colors generally are more contrasting in floridensis than in transversa; the yellows are replaced by orange and the browns by black especially on the head. The abdomen widens out near the extremity in the same manner in both species; in both the appendages are nearly entirely pale in color, and except as indicated the spots and colors are also about the same in both.

#### MEASUREMENTS IN MILLIMETERS.

	Mal	e Type.
Total length		65
Width of bead across eyes		10
Length of abdomen		46

Length	of	front	wing			 ٠.		 				 	 40
Length	of	front	tibia .	 	٠.	 		 	٠.	 		 	 8
Length													

The measurements of the male paratype, collected at the same time and place, are almost exactly those of the type.

The large size, the narrow occiput, the shining black areas behind the eyes, and the clear antecubital areas of both pairs of wings of *floridensis* will readily separate it from *transversa*.

## CICINDELA TRANQUEBARICA AND ITS HABITS.

By W. T. Davis, Staten Island, N. Y.

Cicindela tranquebarica was observed at Coram, Long Island, on the farm of Benjamin Still, situated in the sandy district about a mile north of the village, on September 19, 1920.

About four o'clock in the afternoon I selected a particular Cicindela tranquebarica on the sandy wood-road in the pines west of the house and commenced to watch it. It often ran about at considerable speed, would occasionally capture a small insect, and anon would remain quiet for a considerable time. Only once did it fly, at which time it changed its position about 20 feet to the west. Once it ran up to my shoe as I sat on the carpet of bear-berry vines by the side of the path. It started to dig a hole at the side of the path, but quit after working four minutes. Later it found a depression in the sand caused by the foot of a horse and commenced to dig a second hole at that part of the depression presenting a perpendicular face about one and one-half inches high. The beetle worked fifteen minutes, making a tunnel with its head in the hole and throwing out the sand with its legs. Then it turned about and backed into the hole, but did not close up the mouth of the tunnel; its head and mandibles were visible near the entrance. This was at 4.55 P.M. I secured a straw and gently poked the beetle, which would open its mandibles and fight back. I went away after teasing it a while and left it to its night's repose.